

## CLAIMS:

1. A low-pressure gas discharge lamp, which is equipped with a gas-discharge vessel containing an inert gas filling as the buffer gas and an indium, thallium and/or copper halide, and with electrodes and with means for generating and maintaining a low-pressure gas discharge, characterized in that it has, as the electron emitter substance, a mixture of BaO,  
5 SrO, CaO, and MgO, wherein:
  - a) the molar proportion of BaO is less than 1 percent by weight,
  - b) the molar proportion of SrO is less than 10 percent by weight,
  - c) the sum of the molar proportions of CaO and MgO is greater than 90  
10 percent by weight, while the CaO proportion in the CaO/MgO mixture lies between 10 and 90 percent by weight.
2. A low-pressure gas discharge lamp as claimed in claim 1, characterized in that it contains an inert gas from the group of helium, neon, argon, krypton and/or xenon as the  
15 buffer gas.
3. A low-pressure gas discharge lamp as claimed in claims 1 and 2, characterized in that a fluorescent coating is applied to the interior and/or exterior of the gas discharge vessel.
- 20 4. A use of the electron emitter substance as claimed in claim 1 for coating electrodes in discharge lamps.
5. A use of the electron emitter substance as claimed in claim 1 for coating a titanium, zirkonium, hafnium or tungsten electrode.